

HCFC-Free Ultra-Low  
Temperature Freezer

MDF-U5386S



MDF-U5386S

Temperature  
(Ambient temp. 30°C)

**-86°C**

Effective capacity

**483 Liter/17.1 cu.ft.**

**320 pcs.**

2" inventory boxes

**Large capacity Ultra-Low Freezer  
with robust cooling performance**

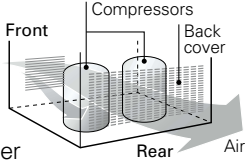
- Safe operation with advanced refrigeration system
- Improved accessibility
- Quiet operation
- Enhanced security
- The inner doors are removable for cleaning and defrosting
- Can hold up to 320 pcs. of 2-inch boxes or 192 pcs. of 3-inch boxes

# MDF-U5386S

## Features

### EVOLUTIONARY DESIGN

- The newly developed refrigeration system and the freezer structure offer a quiet experimental environment.
- Achieves 10% higher energy conservation than previous model.  
(For model rated 220V, 50Hz)
- The newly developed back cover combined with new aerodynamically designed and placed components in the refrigeration compartment provide superior air flow, making it possible to drastically reduce the stress to the freezer and contributing to excellent durability.
- Two independent and insulated inner doors prevent cold air leakage.



### ACCESSIBILITY

- A new beak style inner door latch tightly closes the inner door against the freezer frame. It also helps make opening and closing the door smoother.
- The condenser filter is situated at the bottom right side of the front panel to make filter removal and cleaning easier.



### SAFETY

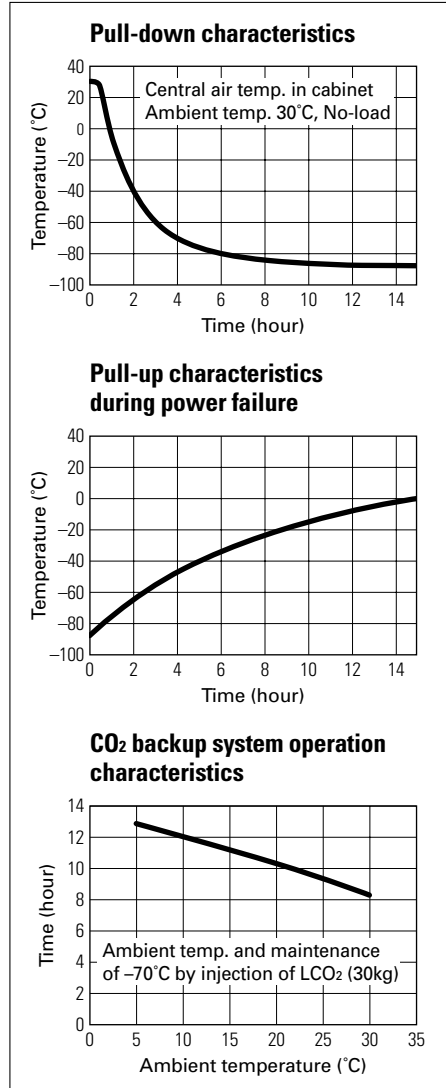
- Alarm lamp and buzzer offer secure warning of power failure or abnormal temperature increase.
- High and low temperature warning provides an audible and visual alarm when the temperature deviates more than  $\pm 5^{\circ}\text{C}$  to  $\pm 20^{\circ}\text{C}$  (adjustable) from the set point.
- Alarm ring back function ensures that buzzer will resume operation, should alarm conditions continue after it is silenced.
- Microprocessor-controlled filter-clog check function protects the refrigeration circuit.
- New rugged, one-handed outer door latch has a hole to allow a padlock to securely protect valuable samples.



- Control panel with digital display for easy operation.

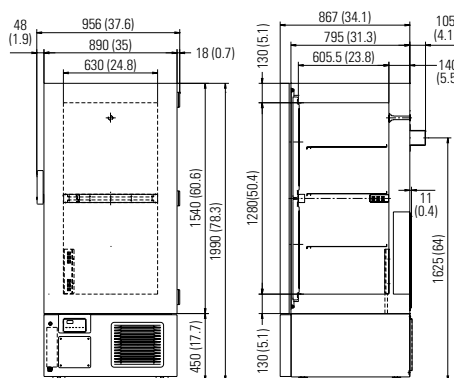


## Performance Data



## Dimensions

[Unit: mm (inch)]



## Specifications

Model	MDF-U5386S
Temperature range	$-50^{\circ}\text{C}$ to $-86^{\circ}\text{C}$ ( $1^{\circ}\text{C}$ increment)
Maximum cooling performance	$-86^{\circ}\text{C}$ (Ambient temp. $30^{\circ}\text{C}$ )
Exterior dimensions (W x D x H)	890 x 875 x 1990mm (35.0" x 34.4" x 78.3")
Interior dimensions (W x D x H)	630 x 600 x 1280mm (24.8" x 23.6" x 50.4")
Net weight	Approx. 305kg (672 lbs.)
Effective capacity	483 L (17.1 cu.ft.)
Shelf	Stainless steel, Adjustable, 3 shelves, W608 x D533mm, Max. load: 50kg (110 lbs./shelf)
Access port	17mm diameter, 3 locations (back, bottom left/right corner)
Compressor	Hermetic type, Output: 1100 W (high stage side), 1100 W (low stage side)
Refrigerant	HFC refrigerant
Alarm	High/low temperature, Power failure, Filter check, Battery check
Remote alarm contact	Allowable contact capacity: DC 30V, 2A
Accessories	1 set of keys, 1 scraper

\*Cooling performance is indicated by the temperature reached at the center of the freezer (at ambient temperature of  $30^{\circ}\text{C}$  with no load). In order to use the freezer at a stable temperature for a long time, it is recommended that the temperature be set to at least  $5^{\circ}\text{C}$  higher than the indicated lowest temperature. In addition, depending on the usage conditions, it may not be possible to reach the indicated lowest temperature.

#### Caution:

SANYO guarantees the product under certain warranty conditions. SANYO in no way shall be responsible for any loss of content or damage to content.

- Appearance and specifications are subject to change without notice.

## Options



Inventory rack  
IR-220U

#### Rack Capacity

For 2-inch box	
IR-220U	16
For 3-inch box	
IR-312U	16



Circular recorder  
MTR-G85

#### Strip chart recorder MTR-85H

Recorder mounting bracket  
**MDF-S3085**  
(for MTR-85H)



LCO<sub>2</sub> backup system  
CVK-UB2

SANYO DAQ  
(Data Acquisition) system  
**MTR-480**  
**MTR-2000**

SANYO Electric Co., Ltd., Biomedical Division, Gunma is certified for:

**Quality management system: ISO9001 / Medical devices quality management system: ISO13485 / Environmental management system: ISO14001**

RoHS (European Restriction of Hazardous Substances directives) compliant

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